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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602,950	06/24/2003	Tomoki Yoshihama	Aikawa Case 30	1039
23474	7590	06/11/2004	EXAMINER	
FLYNN THIEL BOUTELL & TANIS, P.C.			ABDELNOUR, DENNIS J	
2026 RAMBLING ROAD			ART UNIT	
KALAMAZOO, MI 49008-1699			PAPER NUMBER	

3681

DATE MAILED: 06/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/602,950

Applicant(s)

YOSHIHAMA ET AL.

Examiner

Dennis J. Abdelnour

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 24 June 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 June 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 6/24/2003.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

The following is a first action on the merits of application serial 10/602,950 filed on June 24, 2003. Claims 1-4 are pending.

#### *Priority*

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on 08/19/2002. It is noted, however, that applicant has not filed a certified copy of the JP-2002-238177 application as required by 35 U.S.C. 119(b).

#### *Drawings*

2. Figure 5 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

#### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 and 3-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Ida (USPN 4,774,854).

Ida discloses a differential gearing unit for a vehicle as shown in Figures 6-8 comprising: an internal gear (42), a sun gear (41) disposed inside the internal gear on a concentric circle therewith, planet gears (44) disposed between the internal gear and the sun gear in meshing engagement therewith for transmitting torques, and a planetary carrier (43) for carrying the planet gears so as to be capable of revolving around an axis of the sun gear and on their own axes;

the internal gear being molded by a plastic working, the internal gear including an internal gear teeth formed on the inner peripheral surface and a spline groove (42a) formed on the outer peripheral surface which are axially displaced from each other;

the sun gear (41) is disposed inside the planetary carrier so as to be axially moveable; and

a drive from an engine is input to the planetary carrier while the internal gear and the sun gear are connected to one or the other of the front (axle 33) and rear wheel (axle 34) of a four-wheel driven vehicle.

5. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Ishihara et al. (USPN 5,527,229).

Ishihara discloses a differential gearing unit for a vehicle as shown in Figure 1 comprising:

an internal gear (5), a sun gear (10) disposed inside the internal gear on a concentric circle therewith, planet gears (11) disposed between the internal gear and the sun gear in meshing engagement therewith for transmitting torques, and a planetary carrier (13) for carrying the planet gears so as to be capable of revolving around an axis of the sun gear and on their own axes;

the internal gear being molded by a plastic working, the internal gear including an internal gear teeth (4) formed on the inner peripheral surface and a spline groove (3) formed on the outer peripheral surface which are axially displaced from each other;

the spline groove (3) on the outer peripheral surface of the internal gear is effective to transmit an input and/or an output;

the sun gear (10) is disposed inside the planetary carrier so as to be axially moveable; and  
a drive from an engine is input to the internal gear (5) while the planetary carrier (13) and the sun gear (10) are connected to one or the other of the front and rear wheel of a four-wheel driven vehicle.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. USPN 4,943,267 shows a ring gear member in Figure 3 having internal gearing and an external spline. USPN 4,677,875 (figure 2) and USPN 4,704,921 (Figures 1 and 4) also show ring gears having an internal gearing and an external spline.

### ***Facsimile Transmission***

7. Submission of your response by facsimile transmission is encouraged. Group 3600's facsimile number is **(703) 872-9326**. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mailroom processing and delivery time. For a complete list of correspondence not permitted by facsimile transmission, see MPEP 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile

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transmission. Responses requiring a fee which applicant is paying by check **should not be** submitting by facsimile transmission separately from the check.

Responses submitted by facsimile transmission should include a Certificate of Transmission (MPEP 512). The following is an example of the format the certification might take:

I hereby certify that this correspondence is being facsimile transmitted to  
the Patent and Trademark Office (Fax No. (703) 305-3597) on \_\_\_\_\_

(Date)

Typed or printed name of person signing this certificate:

\_\_\_\_\_

\_\_\_\_\_

(Signature)

If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and MPEP 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response after your response has been transmitted by facsimile will only cause further unnecessary delays in the processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis J. Abdelnour whose telephone number is (703) 305-5309.

The examiner can normally be reached on Monday-Friday, 8:00-5:30, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on (703) 308-0830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

dja

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June 1, 2004

*Charles A. Mahmud 6/4/04*  
CHARLES A. MAHMUD  
SUPERVISORY PATENT EXAMINER  
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